R16

Code No: 132AD

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech I Year II Semester Examinations, August/September - 2017

COMPUTER PROGRAMMING IN C (Common to EEE, ECE, CSE, EIE, IT)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks) [2] Give the decimal equivalent of $7AC_{(16)}$. 1.a) What is ternary operator in C? Give example expression for its use. [3] b) [2] List the advantages of functions. c) [3] How to declare and initialize a multi dimensional array? d) What is the purpose of pointers? e) List the input/output functions for strings. f) What are the different type castings supported in C? g) Give an example for nested structure. h) [2] Contrast fread and fscanf functions. i) What is meant by opening a data file? How is this accomplished? [3] i)

PART-B

(50 Marks)

Why is C language known as middle-level language? 2.a) [5+5]Draw a flow chart to find average of 10 numbers. What is associativity? Illustrate its application in expression evaluation. 3.a) [5+5] Which statement is a multi way selection statement? Why? b) What is the difference between actual and formal parameters? With illustrative examples 4. [10] explain parameter passing techniques. OR Write a recursive function to print Fibonacci sequence. 5.a)

b) Discuss the applications of arrays. [5+5]

6.a) How to declare a pointer to a function? What is its use?

b) What is the difference between calloc and malloc functions? [5+5]

OR

7.a) Write a program to display the location of a character 'T' in a given string.

b) Give the signatures of getch, puts functions. [5+5]

8.a) Differentiate between structure and union? Give an example usage. b) What is the benefit of bitfield usage? [5+5] OR 9. Write a program using structures to search a name in a record of ten mobile subscribers and print the name, address, bill number and amount of the searched record. [10] 10. Write a program to copy contents of one file to another using file names passed as the command line arguments. [10] OR What are the modes in which files can be opened? Write a program to store students information (id, name, address, marks) into a file and print the information from the file. ---00O00----